A REVISION OF THE GENUS MACROPOGON MOTSCH¹

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Large collections of the species of the genus Macropogon have proved that the keys of Horn² and Brown³ were based more or less on sexual characters. The antennæ in the males are slightly more slender than in the females, except in the new species herein described under the name sequoiæ, where the antennæ of both sexes are notably slender. In testaceipennis Horn and piceus Lec. the antennæ have segments 2-3-4 very short in the male, about as long as wide, while the females have 3 and 4 longer than wide, but in both sexes of sequoiæ 3 and 4 are much longer than wide. In all species segments 2, 3 and 4 combined are longer than 5 in the female, and shorter than 5 in the males.

Probably the most definite sexual difference is in the prothorax. In the males it is inflated behind the middle, sometimes almost forming lateral tubercles, and compressed before the middle so that the lateral margin is strongly sinuate and the pronotum more or less flattened. In the females the margin is nearly straight or arcuate and the pronotum quite convex.

On the pronotum of all species are more or less polished areas which if examined closely are parts of a broken heartshaped outline. In piceus this outline is generally quite perfect while in the other species it is more or less indistinct.

Through the kindness of Mr. K. G. Blair of the British museum I am able to append M. Pic's description of Macropogon rubricollis.

KEY TO THE SPECIES

- Antennæ very slender, segments 3 and 4 longer than 2 in
- AA. Antennæ comparatively stouter, segments 2-3-4 approximately as long as wide in the males, 3 and 4 much longer than 2 in the females; color black or bicolored.
 - Vestiture of the elytra and prothorax dense and long; elytra never entirely uniform in color, generally dis-
 - BB. Vestiture of elytra and prothorax shorter and sparser,

¹ Contribution from the Entomological Branch, Ottawa. ² 1880, Trans. Am. Ent. Soc., VIII, p. 77. ³ 1929, Can. Ent., Vol. LXI, Dec., p. 273.

1. Macropogon sequoiæ Hopping, n. sp.

Length, male, 5-6 mm., female, 6 to 7.5 mm. Color rufous brown throughout with elytra slightly darker than the rest of the body.

Holotype, male. Head with front with medium sized punctures well separated; antennæ very slender, segment 2 short, as wide as long, segments 3 and 4 longer than wide, segment 5 longer than 2-3-4 combined. Prothorax enlarged laterally behind the middle, constricted before the middle and comparatively flat on the disc of the pronotum; punctures of the disc of medium size and sparse; pronotum with a shallow basal transverse impression. Elytra with striæ scarcely at all impressed and strial punctation well separated, of medium size, becoming slightly smaller toward the apices; strial intervals with irregular polished points slightly raised above the surface. Vestiture golden and rather sparse. Prosternum with strongly carinate margin, brown with flavous interior area sparsely tuberculate.

Allotype, female. Differs from the male in the shape of the prothorax, pronotum more convex with lateral margins nearly straight, and generally more robust with antennæ slightly shorter.

Holotype, bearing the label "VII-15, Kaweah Cal." No. 3980, in the Canadian National Collection. Allotype, bearing the same label, in the author's collection. Paratypes: 12 males, 8 females. Six males and 5 females bearing the same label as the types, one male bearing the label "Kaweah, Tulare Co., Calif. V-1934" and 5 males and 3 females bearing the label "Sequoia National Park, Cal.," and the dates May and August 1930 and 1931.

The entire series was sent me by Mr. F. T. Scott of Visalia, California, and Mr. Roy Wagner of Fresno, California. Paratypes are in the collections of the above, the Academy of Sciences of San Francisco, the Canadian National Collection and of the author.

M. sequoiæ can easily be separated from any other known species by the slender antennæ, segments 3 and 4 the same in both sexes, the slender tarsi, and the reddish brown color.

Forty specimens have been examined all from the same general locality, the Kaweah River, Tulare Co., California. Those labelled "Sequoia National Park" are from a slightly higher elevation than those labelled "Kaweah" but in the same general location.

2. Macropogon testaceipennis Mots.

Macropogon rubricollis Pic. 1927, Melanges Exot., Ent. L. p. 34.
Macropogon cribricollis Brown. 1929, Can. Ent., Dec., vol. LXI,
p. 274.

Length, male, 4.5-7 mm.; female, 6-8 mm. The elytra of this species are very variable in color. In typical specimens the testaceous elytra have the suture black with apical marginal black band. This coloring is more or less indefinite and merges to all black with humeri rufous. Specimens with elytra entirely rufous except sutural black band are not uncommon. M. Pic's rubricollis seems to be such a specimen.

The antennæ are stout in the females, more slender in the males. In the male segments 2 to 4 are about as long as wide, with the 5th longer than 2, 3, and 4 combined. In the female segments 3 and 4 are longer than wide and 2 to 4 combined are longer than the 5th. The prothorax in the males is constricted before the middle, while that of the female is straight or evenly arcuate, and more convex than in the male. This difference in the prothorax between the sexes is also constant in the other species.

The punctation of the prothorax is moderate compared with piceus and comparatively dense while the interspaces at the base of the elytra are very wide with striæ more deeply impressed and strial punctures large.

In the 70 specimens before me it is noticeable that specimens captured in March or April are generally light colored and those taken in late June or July are mostly black with rufous humeri. This would indicate that they become darker as the season advances, which is not uncommon in some species of coleoptera.

Large series taken at the same time and place also indicate that males predominate over the females in the early spring and vice versa later in the summer.

Although more commonly taken in the Sierra Nevada Mts. it has been found from San Diego to British Columbia in the coast region. Dr. Horn's specimens were from Mariposa, California, as was also *rubricollis* Pic.

3. Macropogon piceus Lec.

1861, Proc. Acad. Nat. Sci. Phila., p. 362.

Macropogon rufipes Horn, 1880, Trans. Amer. Ent. Soc., VIII, p. 79.

Macropogon dubius Brown, 1929, Can. Ent., Dec. vol. LXI, p. 273.

Length, male, 5-6 mm., female, 6-7 mm. This species is generally piceus in color although the legs and antennæ are sometimes reddish brown, and more or less shining. The synonomy is almost entirely due to the difference in sexual characters as explained in the introduction.

Twenty-five specimens have been examined from British Columbia, Alberta, Quebec, New Brunswick, and New Hampshire. Horn gives Oregon, Montana and Illinois, and the Leng Check List Michigan.

MACROPOGON RUBRICOLLIS Pic.

"Angustatus, nitidus, grisea pubescens, ruber, infra corpore pro parte elytrisque nigropiceis; antennis sat gracilibus; capite thoraceque fortiter, parum dense, punctatis, illo breve, antice paulo attenuato; elytris thorace sat latioribus, longissimis, apices attenuatis, striatis, striis distincte punctatis. Long. 8 mm. Amerique S^{1e}. Mariposa.

Espece tres distincte par ses elytres tres long, conjointement a sa Coloration en majeure partie rougeatre."

The above description of M. Pic's M. rubricollis is given as it is difficult to obtain the publication and it may be useful to future workers. Mr. H. C. Fall has already relegated M. dubius Br. and M. cribricollis Br. to the synonmy and a very careful comparison of specimens of the latter from B.C. and specimens of testaceipennis from California have failed to establish any specific difference.

Mr. W. J. Brown very kindly loaned me a paratype of his cribricollis and eastern specimens of what was known as pallipes at the same time expressing his belief that it was the same as piceus. I am also indebted to Mr. H. C. Fall for comparisons and to Messrs. Roy Wagner, G. Stace Smith, F. T. Scott and Hugh B. Leech for their entire collections of the genus Macropogon.

^{4 1934,} Pan-Pac. Ent., Vol. X, Oct., p. 172.